

SARKISYAN, S.G.

Mineralogy of sedimentary rocks and the petroleum industry of the
U.S.S.R. Vop.min.osad.obr. 3/4:87-106 '56. (MLRA 9:11)

1. Institut nefti Akademii nauk SSSR, Moskva.
(Petroleum geology) (Rocks, Sedimentary)

15-57-12-17260
Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12,
p 80 (USSR)

AUTHORS: Sarkisyan, S. G., Malkhasyan, E. G.

TITLE: Concretionary Formations in the Upper Cretaceous
Deposits Near the Station of Romanovka (Konkretsiionnyye
obrazovaniya v verkhnemelovykh otlozheniyakh u st.
Romanovka)

PERIODICAL: Sb. nauchn. tr. Yerevansk. politekhn. in-t, 1956,
Nr 13, pp 65-68

ABSTRACT: Spherical or sometimes flat slipsoidal concretionary
formations, ranging in size from 5 cm to 25 cm or 30 cm,
can be found lying parallel to the bedding in the
sandstones of the Romanovka horizon (Upper Cretaceous).
These concretions consist of sandstones, the density of
which increases towards their centers. The concretions
are greenish on the surface and consist of potassium
feldspar (sanidine--25 percent) quartz (10 to 15 per-

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15-57-12-17260

Concretionary Formations in the Upper Cretaceous (Cont.)

cent), plagioclase (20 percent), a metallic mineral (magnetite grains); the autogenous minerals are represented by chlorite, calcite, sericite, and hydrous iron oxides. The centers of the concretions are occupied by porphyritic fragments. The authors refer to these formations as psuedoconcretions because they represent the rounded porphyritic fragments with the "glued on" sandy material. The formation of these psuedoconcretions took place in a shallow lake under subaqueous conditions. The final stage of their formation is associated with the diagenesis of the sediments.

Card 2/2

T. A. Gretskaya

PREOBRAZHENSKIY, I.A.; SARKISYAN, S.G.

Concerning the review of K.V.Ivanov and I.U.P.Kazanskii of the book
"Minerals of sedimentary rocks." Izv.AN SSSR Ser.geol.21 no.3:116
Mr '56. (Mineralogy) (MLRA 9:7)

SARKISYAN, S.G., professor.

Problems in the petrography and mineralogy of sedimentary rocks.
Priroda 46 no.2:104-105 P '57. (MLRA 10:3)

1. Institut nefti Akademii nauk SSSR. Moskva.
(Rocks, Sedimentary)

3(5)

PHASE I BOOK EXPLOITATION

SOV/1320

Sarkisyan, Sergey Galustovich

Mezozoyskiye i tretichnyye otlozheniya Pribaykal'ya, Zabaykal'ya i Dal'nego Vostoka (Mesozoic and Tertiary Sediments of Pribaykal'ye and the Soviet Far East) Moscow, Izd-vo AN SSSR, 1958. 336 p. 1,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut nefti. Laboratoriya paleogeografii.

Resp. Ed.: Fedorov, S.F., Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: Shapovalova, G.A.; Tech. Ed.: Kiseleva, A.A.

PURPOSE: This book is intended for geologists, petroleum geologists, and scholars in associated research fields.

COVERAGE: This is an extensive study of the Mesozoic and Tertiary sedimentary complexes lying between Lake Baykal and the Pacific Ocean. The author discusses the mineralogic-petrographic and granulometric conditions which affect the sedimentary processes

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Mesozoic and Tertiary Sediments (Cont.)

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and the possibilities of oil accumulations in the areas studied. Reviewing the geological history of this region, the author devotes particular attention to its folded structures, which tend generally in a northeasterly direction and are marked by numerous graben-like dislocations. A large part of the book is devoted to a discussion of petrographic conditions bearing on the accumulation of organic matter. The text contains 20 figures, 50 tables and maps. There are 270 Soviet references.

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Card 4/4

SARKISYAN, S. G.

"A Survey of Petrographical and Mineralogical Investigations by the USSR Oil Industry
"Upper Permian Continental Molasse (sediments) of the Pre-Urals"
reports presented at the Fifth Intl. Sedimentology Congress., Geneva/Lausanne,
2-7 June 1958.

Acad. Sci. USSR, Moscow

SARKISYAN, S. G.

"Mineralogical Composition of Clays in Petroliferous Deposits of the USSR."

paper distributed at the International Clay Mineralogy Congress in Brussels, Belgium,
1 - 5 Jul 58.

Comment: B-3,116,859

SARKISYAN, Sergey Galustovich; KOSYGIN, Yu.A., otv.red.; RYLINA, Yu.V.,
vskhn.red.

[Review of petrographic and mineralogical studies in the petroleum
industry of the U.S.S.R. and the United States] Obzor petrografo-
mineralogicheskikh issledovaniy v neftianoi promyshlennosti SSSR
i SShA. Moskva, Izd-vo Akad.nauk SSSR, 1959. 84 p. (Itogi nauki:
Geologicheskie nauki, no.1). (MIRA 13:11)

1. Chlen-korrespondent AN SSSR (for Kosygin).
(Mineralogy) (Rocks, Sedimentary--analysis)

KORZH, Mikhail Vasil'yevich; SARKISYAN, S.G., prof., otv.red.; SHAPOVALOVA,
G.A., red.izd-va; KUZ'MIN, tekhn.red.; MAKUN, Ye.V., tekhn.red.

[Petrography of Triassic sediments in the southern Maritime Territory
and the paleogeography of the time of its formation] Petrografiia
triasovykh otlozhenii Iuzhnogo Primor'ia i paleogeografiia vremeni
ikh obrazovaniia. Moskva, Izd-vo Akad.nauk SSSR, 1959. 82 p.
(MIRA 12:4)

(Maritime Territory--Petrology)
(Maritime Territory--Paleogeography)

30(7)
AUTHOR: Sarkisyan, S.G., Professor (Moscow) SOV/26-59-2-14/53
TITLE: The International Congress on Sedimentology (Mezhdu-
narodnyy kongress po sedimentologii)
PERIODICAL: Priroda, 1959, Nr 2, p 76 (USSR)
ABSTRACT: The Fifth International Congress on sedimentology
took place in Geneva in the summer of 1958. Basic
papers read at the Congress were concerned with the
origin and the conditions of occurrence of peculiar
sedimentary formations - the flysch and mollasses
formations widely known in the Alps, but also found
in the USSR in the Carpathians, Caucasus, Urals and
Central Asia.
ASSOCIATION: Institut geologii i razrabotki goryuchikh iskopay-
emykh AN SSSR (Institute of Geology and Development
of Mineral Fuels of the AS USSR)- Moscow ;

Card 1/1

PUSTOVALOV, L.V., otv.red.; GIMMEL'FARB, B.M., red.; KRASHENINNIKOV,
G.F., red.; SARKISYAN, S.G., red.; SERDYUCHENKO, D.P., red.;
TEODOROVICH, G.I., red.; SHVETSOV, M.S., red.; SMIRNOVA, Z.A.,
red.izd-va; IVANOVA, A.G., tekhn.red.

[Problems of sedimentology; reports of Soviet geologists for
the Sixth International Congress of Sedimentology] Voprosy sedi-
mentologii; doklady sovetskikh geologov k VI Mezhdunarodnomu
kongressu po sedimentologii. Moskva, Gos.nauchno-tekhn.izd-vo
lit-ry po geol. i okhrane neдр, 1960. 215 p.

(MIRA 14:3)

1. International Congress of Sedimentology. 6th, Copenhagen,
1960.

(Rocks, Sedimentary)

SARKISYAN, S.G.

Reply to M.K. Khudolei concerning my book "Mesozoic and Tertiary
sediments in Transbaikalia, the Baikal region, and Far East."
Izv. AN SSSR. Ser. geol. 25 no. 3:109-110 Mr '60. (MIRA 13:12)
(Siberia, Eastern--Geology, Stratigraphic)

GULYAYEVA, L.A.; ZAV'YALOV, V.A.; PODEL'KO, Ye.Ya.; SARKISYAN, S.G., prof.,
otv. red.; MAKARENKO, M.G., red. izd-va; ROMANOV, G.N., tekhn.
red.

[Geochemistry of domanik sediments in the Volga-Ural region] Geo-
khimiia domanikovykh otlozhenii Volgo-Ural'skoi oblasti. Moskva,
Izd-vo Akad. nauk SSSR, 1961. 102 p. (MIRA 14:8)
(Volga-Ural region--Shale)

SEROVA, Ol'ga Vasil'yevna; SARKISYAN, Sergey Galustovich; MISAYLOVA,
V.M., red.; AKHANOV, TS.B., tekhn. red.

[The gem of Eastern Siberia] Zhemzhuzhina Vostochnoi Sibir. Ulan-
Ude, Buriatskoe knizhnoe izd-vo, 1961. 167 p. (MIRA 15:12)
(Baikal Lake region--Discovery and exploration)
(Baikal Lake region--Natural resources)

SARKISYAN, Sergey Galustovich; MIKHAYLOVA, Nelli Aleksandrovna, Prini-
mali uchastiye: NIKITINA, R.G., nauchnyy sotr.; TROFIMU, I.A.,
nauchnyy sotr.; FEDOROV, S.F., otv. red.; STOLYAROV, A.G.,
red. izd-va; VOLKOVA, V.G., tekhn. red.

[Paleogeography of the period of the formation of the ter-
rigenous Devonian stratum in Bashkiria and Tatar A.S.S.R.]
Paleogeografiia vremeni obrazovaniia terrigennoi tolshchi de-
vona Bashkirii i Tatarii. Moskva, Izd-vo Akad. nauk SSSR,
1961. 231 p. (MIRA 15:1)

1. Chlen-korrespondent AN SSSR (for Fedorov).
(Bashkiria—Paleogeography) (Tatar A.S.S.R.—Paleogeography)

PROTSVETALOVA, Tat'yana Nikolayevna; SARKISYAN, S.G., prof., otv. red.;
TURSHU, A.I., red. izd-va; DOROKHINA, I.N., tekhn. red.

[Ostrog series of the Kuznets coal basin and conditions of its formation] Ostrogskaia svita Kuznetskogo kamennougol'nogo basseina i usloviia ee obrazovaniia. Moskva, Izd-vo Akad. nauk SSSR, 1961. 119 p.
(MIRA 14:11)

(Kuznets Basin--Coal geology)

BALAYEV, Vasilii Alekseyevich; PISTRAC, R.M., retsenzents; SARKISYAN, S.G., retsenzents; TROFIMUK, A.A., retsenzents; KOROBova, I.E., red.; ZENIN, V.V., tekhn. red.

[Devonian sediments in the central and southern regions of the Volga-Ural Province in connection with oil potential. 28 diagrams and maps] Devonskie otlozheniia tsentral'nykh i iuzhnykh raionov Volgo-Ural'skoi provintsii v svyazi s perspektivami ikh neftenosnosti. Saratov, Izd-vo Saratovskogo univ., 1961. 294 p. — 28 skhem i kart. (MIRA 15:6)
(Volga-Ural region—Petroleum geology)

SARKISYAN, S.G.; IN FYN-SYAN [Ying Fêng-hsiang]; ZKHUS, I.D.; KLEVITS, M.V.;
CHZHEN AY-CHZHU [Cheng Ai-chu]

Clay minerals and scattered organic matter in Cretaceous sediments
of an eastern trough in the Chinese People's Republic. Izv.vyx.ucheb.
zav.; geol. i razv., 4 no.12:43-48 D '61. (MIRA 15:2)

1. Institut geologii i razrabotki goryuchikh iskopayemykh.
(China--Clay)(Organic matter)

SARKISYAN, Sergey Galustovich; MESROPYAN, A.I., otv. red.;
KHACHATURYAN, E.A., red. izd-va; KAPLANIAN, M.A., tekhn.
red.

[Petrographic and mineralogic studies of the Lake Sevan
basin] Petrografo-mineralogicheskie issledovaniia basseina
ozera Sevan. Erevan, Izd-vo Akad. nauk Armianskoi SSR,
1962. 152 p. (MIRA 15:11)
(Sevan, Lake--Petrology)

GUROVA, Tamara Ivanovna; KAZARINOV, Vladimir Panteleymonovich; SARKISYAN, S.G., doktor geol.-mineral.nauk, prof., red.; IONEL', A.G., ved. red.; FEDOTOVA, I.G., tekhn. red.

[Lithology and paleogeography of the West Siberian Plain in connection with its oil and gas potentials] Litologiya i paleogeografiya Zapadno-Sibirskoi nizmennosti v sviazi s neftegazonosnost'iu. Moskva, Gos.nauchno-tekhn.izd-vo neftianoi i gorno-toplivnoi lit-ry, 1962. 295 p., illus. (MIRA 14:12)

(West Siberian Plain--Petroleum geology)
(West Siberian Plain--Gas, Natural--Geology)

SARKISYAN, S. G.; PETROSOV, I. Kh.

"Main factors for clay mineral formation of Tertiary volcanic and sedimentary deposits on the territory of the Yerevan District (Armenian SSR)."

Report submitted for the International Clay Conference, Stockholm, Sweden, 12-16 Aug 63.

SARKISYAN, S.G.; PROTSVETALOVA, T.N.

Some petrographic characteristics of bituminous argillites in the Mar'yanovskaya series (West Siberian Plain). Izv. vys. ucheb. zav.; geol. i razv. 7 no.2:56-60 F'64. (MIRA 17:2)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR.

SARKISYAN, S.G.; MOVSESYAN, M.A.

Possibility of the development of vibrational waves based on the content of anhydrite in the Miocene salt-bearing layer in the Erivan region. Dokl. AN Arm. SSR 37 no.4:221-225 '63.
(MIRA 17:8)

1. Institut geologicheskikh nauk AN ArmSSR. Predstavleno akademikom AN ArmSSR A.A. Gabriyelyanom.

TAZHIBAYEVA, Patchaim Tazhibayevna; SARKISYAN, S.G., prof., otv.
red.; NESTEROVA, I.I., red.

[Lithological investigations of Dzhezkazgan series in
connection with the problem of the ore genesis of the
Dzhezkazgan deposit] Litologicheskie issledovaniia
Dzheskazganskikh svit v sviazi s problemoi genezisa rud
Dzheskazganskogo mestorozhdeniia. Alma-Ata, Izd-vo AN
Kaz.SSR, 1964. 275 p. (MIRA 17:12)

SARKISYAN, S.G., doktor geol.-miner. nauk, otv. red.

[Geology and oil and gas potentials of the West Siberian Plain] Geologicheskoe stroenie i neftegazonosnost' Zapadno-Sibirskoi nizmennosti. Moskva, Nauka, 1964. 227 p.

(MIRA 17:12)

1. Moscow. Institut geologii i razrabotki goryuchikh iskopayemykh.

BURNACHYAN, G.A.; SARKISYAN, S.M.

Selecting the optimal operation cycle of a pumped storage hydro-
electric power station in a power system. Izv. AN Arm. SSR. Ser.
tekh. nauk 17 no.4:53-60 '64. (MIRA 17:11)

1. Yerevanskiy politekhnicheskii institut imeni K. Marksa.

SARKISYAN, S.M.

Def. at
Tbilisi State U.

- Давидзе Давид Иванович. ил. Докладный центр агущи. 1944.
Именами белая в вегетативных гдир-
лах фссы. 1952. 156 с.
Заг. 1953. 30.6.
1054. Саркисян Савосстру Мар-
гаросович. Тестирование изучение
комнатной муш с целью выработки мо-
ного биологического метода борьбы с
ней. Ереван. 1942. 91, 5 с. [5] ил. ил.
и. Заг. 1944. 24.4.
1055. Саваназе Игорь Конс-
тантин. Краткий обзор гис-
тологии слизистой оболочки желудка
у зверя позвоночных. 1951. 174 с. 39
рис. ил.
Заг. 1955. 21.2.
1056. Собаева Ольга Борисо-
вна. Социал-испытание для выделенной
абсолютной интенсионации. 1950. 2, V.
22 с. 10 ил., рис.
Заг. 1951. 30.5.
1057. Родригес Александр Илья-
севич. Докладный центр агущи. 1944.
Заг. 1944. 25.6.

Dissertation for degree of

Candidate Biological Sciences

SARKISYAN, S.M.

Effect of the transplantation of fertilized rabbit oviducts on the
live weight of the developed embryo. Izv. AN Arm. SSR. Est. nauki no. 10:
63-67 '47. (MLA 9:8)

1. Institut zhivotnovodstva AN Armanianskoy SSR, Laboratoriya genetiki
sel'skokhozyaystvennykh zhivotnykh.
(Transplantation (Physiology)) (Ovum)

SARKISYAN, S. M.

PA 77T61

USSR/Medicine - Heredity, Mechanism
Medicine - Rabbits

Apr 1948

"On the Interaction of the Azure and Madder Color
Factors in the 'Soviet Madder' Family of Rabbits,"
S. M. Sarkisyan, 4 pp

"Dok Ak Nauk SSSR" Vol LX, No 3

Since subject rabbit was developed 10 years ago, its
breeding became an industry, meat is used as food
and pelt is utilized as fur. Gives results of ex-
periments showing effect of light grey rabbits on
blue rabbits when the two are interbred. Submitted
by Acad I. I. Shmal'gauzen 5 Feb 1948.

77T61

SARKISYAN, S.M.: KHUDAVERDYAN, B.S.

Selective fertilization in the silkworm. Izv. AN Arm.SSR. Biol. i
sel'khoz. nauki 2 no.6:531-536 '49. (MIRA 9:8)

1. Institut fitopatologii i zoologii Akademii nauk Armyanskoy SSR. i
Yerevanskiy opornyy punkt shelkovodstva.
(SILKWORMS) (FERTILIZATION (BIOLOGY))

SARKISYAN, S.M.; TUMANYAN, O.A.

Experiment on the feeding of silkworms with the leaves of the
goatbeard (Tragopogon). Izv. AN Arm. SSR. Biol. i sel'khoz. nauki.
4 no.12:1161-1167 '51. (MLRA 9:8)

1. Institut fitopatologii i zoologii Akademii nauk Armyanskoy SSR.
(Silkworms) (Goatsbeard)

SARKISYAN, S.M.

Some particularities of the condition of the maternal organism.
as the formative medium of the offspring. Izv. AN Arm. SSR. Biol. i
sel'khoz. nauki. 5 no.10:3-13 '52. (MLRA 9:8)

1. Institut genetiki AN Armyanskoy SSR.
(Genetics)

SARKISIAN, S. M.

"The Biological Effect of Heterospermic Seeding Among Animals." (p. 311)
by Sarkisyan, S. M.

SO: Journal of General Biology (Zhurnal Obshchey Biologii), Vol. XIII, No. 4, July- Aug,
1952.

SARKISYAN, S.M.

CERS-L No. 43

Sarkisyan, S.M. (Institute of Phytopathology and Zoology, Armenian S.S.R. Academy of Sciences); The effect of the living conditions of the parents on the productivity of the progeny of the mulberry silk-worm, 511-5

Akademiya Nauk S.S.S.R. Doklady Vol. 79 No. 3 511

SARKISYAN, S. M.

Dissertation: "The Biological Nature of the Principal Effect of the Maternal Organism on the Heredity and Vitality of Descendants in Animals." Dr Biol Sci, Inst of Genetics, Acad Sci USSR, Moscow, Oct-Dec 53. (Vestnik Akademii Nauk, Moscow, Jun 54) [Source gives brief summary of work.]

SO: SUM 318, 23 Dec 1954

SARKISYAN, S.M.

Morphophysiological heterogeneity of the progeny within colony limits in pure-bred silkworms. Izv.AN Arm.SSR,Biol,i sel'khoz. nauki 6 no.2:29-39 '53. (MLRA 9:8)

1. Institut genetiki Akademii nauk Armyanskoy SSR.
(Silkworms)

SARKSYAN, S.M.

Ways of increasing cocoon production in the sixth five-year plan
[in Armenian]. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 9 no.5:95-100
My '56. (MLRA 9:8)

(Armenia--Sericulture)

SARKISYAN, S.M.

Method for the transplantation of caterpillar ovaries and pupal
parabiosis in silkworms. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki
11 no. 5:91-95 My '58. (MIRA 11:7)

1. Armyanskaya nauchno-issledovatel'skaya stantsiya shelkovedstva
Nauchno-issledovatel'skogo instituta zoologii.
(Silkworms)
(Parabiosis)
(Ovaries--Transplantation)

SARKISYAN, S. M.

"The participation of the Organism of the mother and its sytoplasm in the Determination of a number of inherited features of androgynous offspring. "

reported at
Conference on Problem of Heredity and Variability, held at Inst. of Genetics, AS USSR,
8-14 Oct 1957.
Vestnik AN SSSR, 1958, Vol. 28, No. 1, pp. 127-129. (author Kushner, Kh. F.)

SARKISYAN, S.M.; AYKAZYAN, A.K.

Possibility of obtaining offspring from eggs developed in a male organism. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 12 no.1:91-93 Ja '59. (MIRA 12:2)

1. Kafedra zoologii biologicheskogo fakul'teta Yerevanskogo gosudarstvennogo universiteta.
(Ovaries--Transplantation) (Silkworms)

SARKISYAN, S.M.; TUMASYAN, L.A.; AYKAZYAN, A.K.

Materials on the biology of the salva moth (*Galechia malvella* Hb.).
Nauch. trudy Erev. un. 69 Ser. biol. nauk no.8:29-34 '59.
(MIRA 14:9)

1. Kafedra zoologii Yerevanskogo gosudarstvennogo universiteta.
(MOTHS) (COTTON—DISEASES AND PESTS)

SARKISYAN, S.M.

Optimum load distribution between units in thermal electric power plants.
Izv. AN Arm. SSR. Ser. tekhn. nauk 18 no.1:27-36 '65. (MIRA 18:7)

1. Yerevanskiy politekhnicheskiy institut imeni K.Marksa.

SARKISYAN, S.M.

Optimal asymptotic behavior of a reservoir for continuous regulation of a hydroelectric station under probable river flow conditions.
Izv. AN Arm.SSR.Ser.tekh.nauk 18.no.5:21-28 '65. (MIRA 18:12)

1. Yerevanskiy politekhnicheskiy institut imeni Karla Marksa.
Submitted May 10, 1965.

SARKISYAN, S. S., Cand Agr Sci -- (diss) "Soils of the kolkhozes in the Talinskiy rayon of the Armenian SSR in zonal sectioning." Yerevan, 1960. 24 pp; (Committee of the Council of Ministers Armenian SSR for Higher and Secondary Specialist Education, Armenian Agricultural Inst); 150 copies; price not given; (KL, 27-60, 157)

GULKANYAN, V.O.; SURMENYAN, G.A.; ~~SARKISYAN, S.S.~~

Valuable lines of wheat for the mountainous regions of Armenia.
Izv.AN Arm.SSR.Biol.i sel'khoz.nauki, 5 no.8:3-14 '52. (MLRA 9:8)

1. Institut genetiki i selektsii rasteniy Akademii nauk Armyanskoy
SSR.

(Armenia--Wheat--Varieties)

BONDAR', A.N.; SARKISYAN, S.S., inzh.-mekhanik.

Fulfilling the resolutions of the June Plenum of the Central
Committee of the CPSU. Put' put.khoz. no.9:2-3 S '59.
(MIRA 12:12)

1. Nachal'nik Darnitskoy distantii puti, Yugo-Zapadnoy
dorogi (for Bondar').
(Kiev Province--Railroads)

NEZHIVOV, V.R., elektroslesar'; SARKISYAN, S.S., inzh.-mekhanik
(stantsiya Darnitsa, Yugo-Zapadnoy dorogi)

Portable recording electric meter. Put' i put.khoz. 4
no.4:33-34 Ap '60. (MIRA 13:7)
(Electric meters, Recording)
(Railroads--Electric equipment)

ADAMENKO, A.I., kand.tekhn.nauk; YAKOVLEV, V.S., inzh.; BONDAR', A.N.;
(SARKISYAN, S.S., inzh.

Multistep phase converter for the track electric devices. Zhel.
dor.transp. 42 no.2:74-75 F '60. (MIRA 13:5)

1. Nachal'nik Darnitskoy distantsei puti, Kiyev (for Bondar').
(Electric current converters)
(Railroads—Electric equipment)

SARKISYAN, S. Sh.: Master Geolog-Mineralo Sci (diss) -- "Basic outlines of the polymetallic ore deposits of the Merisskiy ore zone". Tbilisi, 1958. 18 pp
(Min Higher Educ USSR, Georgian Order of Labor Red Banner Polytech Inst im S. M. Kirov), 180 copies (KL, No 6, 1959, 128)

SARKISYAN, S.Sh.

~~Hydrothermal changes in wall rocks of the Tanzut sulfur pyrite deposit.~~ Izv. AN Arm. SSR. Ser. geol. i geog. nauk 11 no.3: 63-69 '58. (MIRA 11:10)

1. Kavkazskiy institut mineral'nogo syr'ya.
(Armenia--Pyrites)

SARKISYAN, S.Sh.

Mineralogy of Adzhar complex metal deposits. Geol.sbor.[Kavk.]
no.1:32-42 '59. (MIRA 13:1)
(Georgia--Ore deposits)

SARKISYAN, S.Sh.

Some features of magmatism in the northwestern part of the
Amapiya-Akera structural zone of the Lesser Caucasus during
the post-Mesozoic period. Dokl. AN SSSR 141 no.4:946-949 D '61.
(MIRA 14:11)

1. Kavkazskiy institut mineral'nogo syr'ya, g. Tbilisi.
Predstavleno akademikom D.I. Shcherbakovym.
(Armenia--Rocks, Igneous)

SARKISYAN, S.Sh.

Basic characteristics of the geology and genesis of the
Tandzut iron-pyrite deposit (northern Armenia). Geol. sbor.
[Kavk.] no.2:100-118 '62. (MIRA 17:1)

SHKHSYAN, Sh. A.

AUTHOR: Azizbekov, Sh. A.

TITLE: The Third All-Union Conference on regularities in the formation and distribution of endogenous mineral resource deposits

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, no. 1, 1963, 126 - 128

TEXT: The Conference was held in Baku from September 18 to 23, 1962, it was attended by 455 representatives from scientific and industrial geological organizations including 24 Academicians and Corresponding Members of AS USSR and AS of various republic, 49 Doctors-Professors and 164 Candidates of Geological and Mineralogical Sciences. The Conference was opened by Academician D. I. Shcherbakov, secretary of OGON, AS USSR. The program of the Conference was divided into three main groups; a) regularities in the formation and distribution of endogenous deposits in the Caucasus; b) regularities in the formation and distribution of endogenous deposits of other folding regions of the Alpine cycle; c) general problems of metallogeny. In group a) reports on basic features

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S/011/63/000/001/002/002
A006/A101

The Third All-Union Conference on...

S/011/63/000/001/002/002
A006/A101

of metallogeny and models of detailed metallogenic charts of the Caucasus were delivered by Sh. A. Azizbekov and R. N. Abdullayev (in Azerbaydzhan), S. S. Mkrtchyan (in Armenia), G. A. Tvalchrelidze and Yu. I. Nazarov (in Georgia) and V. I. Orobey (in the Northern Caucasus); V. I. Smirnov reported on peculiarities in magmatism and metallogeny of the geosyncline and plateau stage in the evolution of the Western section of Northern Caucasus. Reports were delivered on magmatism and metallogeny in the Dashkesan ore region (M. A. Kashkay, M. A. Mustafabeyli) Southern Georgia (V. R. Nadiradze) the Sevan-Akera zone (S. M. Sulisyanov) the Allaverdy-Bolina ore region (T. Sh. Gogishvili) and in the small Caucasian intrusives. G. S. Dzotsenidze reported on "Paleogenious volcanism in the Caucasus and metallogeny related to it"; V. N. Kotlyar on "Deposit types related to paleo-volcanism"; papers were delivered on pyrite deposits in the Somkhito-Karabakh and the Sevan-Akera zone (P. F. Sopko); Northern Caucasus (N. S. Skripchenko, V. I. Buzdze) the Chubukhlu-Tanzutsk ore region (S. Sh. Serikyan). Reports were read on polymetallic deposits in Northern Caucasus (A. M. Krasnovidova), North-West Caucasus (O. P. Kornev) and the Mekhmany ore field (N. V. Zaytseva). Other reports dealt with gold (N. Ye. Gukhman, D. G. Saliya) mercury (D. V. Abuyev) and rare metal (F. V. Mustafabeyli) mineralization. Group 2 included reports on

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SARKISYAN, S.Sh.

Some characteristics of igneous activity in the deep fault zone
of Transcaucasia. Izv.AN SSSR,Ser.geol. 28 no.2:9-21 F '63.
(MIRA 16:2)

1. Kavkazskiy institut mineral'nogo syr'ya, Tbilisi.
(Transcaucasia--Geology, Structural)

SARKISYAN, S.Sh.

Pyrite mineralization of the Chibukhli--Tanzut ore region as related to the development of the igneous activity in the Amasiya-Akera zone. Zakonom.razm.polezn.iskop. 7:359-360 '64.

(MIRA 17 6)

1. Kavkazskiy institut mineral'nogo syr'ya.

DOLINA, O.A.; SARKISYAN, S.S.; SHTENGOL'D, Ye.Sh.

Bronchospasm during anesthesia. Eksp. khir. i anest. 9 no.6:
59-62 N-D '64. (MIRA 18:7)

1. Kafedra obshchey khirurgii (zav. - chlen-korresp. AMN SSSR
prof. V.I.Struchkov) lechebnogo fakulteta I Moskovskogo ordena
Lenina meditsinskogo instituta im. I.M.Sechenova i Bol'nitsa Nr.
23 im. Medsantrud (glavnyy vrach A.N.Lobanova).

SARKISYAN, S.Sh.; SHUPLADZE, R.L.

Olivine from dolerites in southern Georgia. Zap.Vses.min.ob-^z. 94
no.2:230-232 '65. (MIRA 18:5)

SARKISYAN, S.TS.

Properties of solutions to Cauchy-Riemann systems with
nonlinear right-hand parts. Dokl. AN Arm. SSR 36 no.3:
143-146 '63. (MIRA 16:10)

1. Institut matematiki i mekhaniki AN Armyanskoy SSR.
Predstavleno akademikom. AN Armyanskoy SSR Dzhrbashyanom.

SARKISYAN, S.TS.

Properties of solutions of Cauchy - Riemann systems with square
supplementary terms. Dokl. AN Arm. SSR 41 no.1:10-13 '65.
(MIRA 18:8)

1. Yerevanskiy politekhnicheskoy institut. Submitted January
25, 1965.

SARKISYAN, V.

Balance-sheet method of accounting for goods and materials.
Prom.Arm. 4 no.10:28-29 0 '61. (MIRA 14:11)
(Industrial equipment)
(Accounting)

SARKISYAN, V.

Journal-voucher No.6. Prom.Arm. 4 no.11:24-26 N '61. (MIRA 15:1)

1. Glavnyy bukhgalter Yerevanskogo zavoda khudozhestvennykh
chasov.

(Armenia—Accounting)

SARKISYAN, V.

Eliminate the shortcomings in the system of planning.
Prom.Arm. 5 no.11:18-19 N '62. (MIRA 15:12)

1. Yerevanskiy zavod khudozhestvennykh chasov.
(Industrial management)

SARKISYAN, V.A.

Complementary determination on a composite hydrochemical graph.
Izv. vys. ucheb. zav.; neft' i gaz 7 no.3:18,24 '64.

(MIRA 17:6)

1. Azerbaydzhanskiy institut nefti i khimii imeni Azizbekova.

SARKISYAN, V.A.

New method for the construction of a clear hydrochemical
graph. Izv. vys. ucheb. zav.; neft' i gaz 6 no.8:56 '63.
(MIRA 17:6)
1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.

MANTASHYAN, A.A.; SARKISYAN, V.K.

Possible ways of acetylene synthesis from methane under
nonisothermal conditions. Dokl. AN Arm. SSR 41 no. 3: 147-
152 '65. (MIRA 18.11)

1. Laboratoriya khimicheskoy fiziki AN ArmSSR. Submitted
March 17, 1965.

ALIYEV, I.A.; NANAZIASHVILI, B.S.; PLYUSHCH, B.M.; SARKISYAN, V.O.

Automated electric drive of a sidewall core lifter. Izv.
vys. ucheb. zav.; nef't' i gaz 6 no.8:87-90 '63.

(MIRA 17:6)

1. Azerbaydzhanskiy institut nef'ti i khimii imeni Azisbekova.

SARKISYAN, V. O.

USSR/Electricity - Motors Starting, Automatic

Sep 51

"Self-Starting of Electric Motors Supplied From a Feeder," Docent B. M. Plyushch, Cand Tech Sci, Docent M. A. Esibyan, Cand Tech Sci, V. O. Sarkisyan, Cand Tech Sci, Azerbaydzhan Industrial Inst imeni Azizbekow; M. D. El 'birt, Engr, "Leninneft" Trust

"Elektrichestvo" No 9, pp 44-49

Electric motors for pumping equipment in oil fields are fed from 320-kva transformers. Each transformer supplies 3 - 4 feeders, each of which may have up to 20 motors connected to it. Describes self-starting system developed by the authors and gives results of expts at operational deep-pumping installations. Submitted 5 Jan 51.

PA 196T47

AID P - 1313

Subject : USSR/Electricity

Card 1/1 Pub. 28 - 2/7

Authors : Plyushch, B. M., and Sarkisyan, V. O.

Title : Experience in self-starting operation of electric motors
for walking beam deep well-pumping installations

Periodical : Energ. byul., #12, 6-13, D 1954

Abstract : A general circuit connected to a trunk line through
automatic switches, power relay, fuse, etc., is presented
for illustration of the operation of self-starting in
electric motors. Various protective regulations are
specified, particularly concerning the safe operation of
deep-well pumping installations.

Institution : None

Submitted : No date

SARKISYAN, V. O.

PLYUSHCH, B.M., kandidat tekhnicheskikh nauk; ESIBYAN, M.A., kandidat tekhnicheskikh nauk; SARKISYAN, V.O., kandidat tekhnicheskikh nauk.

Synchronous electric drive of the principal transmissions of flour mills. Elek.sta. 25 no.7:43-45 JI '54. (MLRA 7:8)
(Electric driving) (Milling machinery)

SARKISYAN, V.O

AID P - 3434

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 1/32

Authors : Plyushch, B. M., and V. O. Sarkisyan, Kands. of Tech. Sci., Dotsents

Title : Electric drive of the walking beam of oil deep-pumping installations

Periodical : Elektrichestvo, 10, 1-6, 0 1955

Abstract : On the basis of relations obtained for four-link mechanisms, the author presents an analytical expression for the static moment and the moment of losses of the pumping machine. The equation of the movement of the electric drive with a variable moment of inertia of the system is solved accounting for losses. For practical calculations simple and sufficiently accurate formulas are suggested for the determination of the capacity of the electric motor and for the maximum static moment. One drawing and 1 diagram.

AID P - 3434

Elektrichestvo, 10, 1-6, 0 1955

Card 2/2 Pub. 27 - 1/32

Institution : Azerbaydzhan Industrial Institute im. Azibekov

Submitted : Ap 4, 1955

MANAZIASHVILI, B.S., inzh.; PLYUSHCH, B.M., dotsent, kand. tekhn. nauk;
SARKISYAN, V.O., dotsent, kand. tekhn. nauk; KULIKOV, B.A., inzh.

Servo system with a photoelectric converter. Izv. vys. ucheb. zav.;
energ. 2 no.10:34-39 0 '59. (MIRA 13:3)

1. Azerbaydzhanskiy ordena Trudovogo Krasnogo Znameni institut
nefti i khimii imeni M. Azizbekova. Predstavlena kafedroy elektro-
privoda, elektricheskikh mashin i elektrooborudovaniya prompredpriyatiy.
(Servomechanisms)

16.9500
AUTHORS: Nanziashvili, B.S., Assistant; Candidate of Technical Sciences, Docent; Plyushch, B.M., Candidate of Technical Sciences, Docent; Sarkisyan, V.O., Kulikov, B.A., Lecturer
69197
3/14/60/000/01/017/019
E073/E135
TITLE: Sensor with Photoelectric Equipment for Isodrome Regulation
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1960, Nr 1, pp 139-142 (USSR)
ABSTRACT: Introduction of an isodrome into a system of astatic regulation gives the system stability and reduces the duration of the transient processes. (Note: an isodrome regulator is defined elsewhere as a variant of an indirect automatic control with a feedback which maintains a given regime with a very low degree of residual nonuniformity or entirely without such a nonuniformity.) At the Chair for Electric Drives, Azerbaydzhan Institute of Oil and Chemistry imeni Azizbekov (Kafedra elektroprivoda, Azerbaydzhanskiy institut nefi i khimii imeni Azizbekova) a photoelectric

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Sensor with Photoelectric Equipment for Isodrome Regulation

integrator was developed which permits obtaining in a simple manner isodrome regulation and to vary as desired the intensity of the regulating effect in proportion to an unbalance signal. In this arrangement there is no flexible feedback and the system remains a single circuit one. The photoelectric integrator has a directional effect (see Fig 1a); it integrates the unbalance signal, which is fed in in the form of a light flux, much more accurately and over a longer period than RC circuits; it does not require amplification of the output voltage, and permits obtaining isodrome regulation in a very simple manner. The principle of this photoelectric integrator was utilised for building a photoelectric pressure sensor consisting of a hydrostatic pressure gauge, which is illuminated by an incandescent lamp (Fig 2); the amount of light hitting each of two photocells depends on the mercury level in the branches of the U-shaped glass tube. This photoelectric pressure sensor unifies the differential metering devices and a proportional transducer, which, in the case of low input signals, has a limited output signal which is then

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Sensor with Photoelectric Equipment for Isodrome Regulation accurately summed. Fig 1b shows the circuit of a transducer of a.c. current into light signals of variable brightness; although the dependence of the light flux on the magnitude of the input voltage is not linear this transducer can be used in servosystems which contain external feedback. The here described integrator can be used in automatic control systems as well as in simulation systems with comparatively long time constants. There are 2 figures, 1 table and 2 Soviet references.

ASSOCIATION: Kafedra elektropriroda, elektricheskikh mashin i elektrooborudovaniya promyshlennyykh predpriyatiy, Azerbaydzhanskiy industrial'nyy institut
(Chair for Electric Drives, Electrical Machinery and Electrical Equipment of Industrial Undertakings, Azerbaydzhan Industrial Institute)

DATE: May 9, 1959

NANAZIASHVILI, Boris Semenovich, assistant; PLYUSHCH, Boris Maksimovich,
dotsent, kand.tekhn.nauk; SARKISYAN, Vachagan Ovanisovich,
dotsent, kand.tekhn.nauk; KULIKOV, Boris Alekseyevich, prepodavatel'

Pickup with a photoelectric device for propotional-integral
control. Izv.vys.ucheb.zav.; elektro-mekh. 3 no.1:60.

(MIRA 13:5)

1. Zaveduyushchiy kafedroy elektroprivoda, elektricheskikh
mashin i elektrooborudovaniya promyshlennykh predpriyatiy
Azerbaydzhanskogo industrial'nogo instituta (for Plyushch).
2. Kafedra elektroprivoda, elektricheskikh mashin i elektrooboru-
dovaniya promyshlennykh predpriyatiy Azerbaydzhanskogo industrial'-
nogo instituta (for Nanaziashvili, Sarkisyan, Kulikov).
(Automatic control)

SARKISYAN, V.O.

Self-starting of a group of electric motors. Prom.energ. 16
no.11:30-32 'N '61. (MIRA 14:10)
(Electric motors--Starting devices)

PLYUSHCH, B.M., kand.tekhn.nauk, dotsent; SARKISYAN, V.O., kand.tekhn.-nauk, dotsent

Simplified formulas for determining the power rating of the electric drives of the pumping jacks of deep-pumping equipment. Izv. vys. ucheb. zav.; energ. 5 no.2:42-49 F '62.
(MIRA 15:3)

1. Azerbaydzhanskiy ordena Trudovogo Krasnogo Znameni institut nefti i khimii imeni M.Azizbekova. Predstavlena kafedroy elektroprivoda, elektricheskikh mashin i elektrooborudovaniya prompredpriyatiy.

(Pumping machinery, Electric)

PLYUSHCH, Boris Maksimovich; ROYTMAN, Mariya Vladimirovna;
SARKISYAN, Vachagan Ovanesovich; ESIBYAN, Migran
~~Aleksandrovich~~; ~~Prinimati~~ uchastiye: KLIMOVA, N.V.;
EL'BIRT, M.D.; PARFENOV, A.N., dots., retsenzent;
TARASOV, D.A., prof., retsenzent; AGADZHANOV, S.P.,
inzh., retsenzent

[Electrical equipment for oil and gas fields] Elektro-
oborudovanie nef'tianykh i gazovykh promyslov. Moskva,
Nedra, 1965. 311 p. (MIRA 18:4)

1. Zaveduyushchiy kafedroy obshchey i spetsial'noy elektro-
tekhniki Groznenskogo nef'tyanogo instituta (for Parfenov).
2. Vsesoyuznyy zaachnyy politekhnicheskii institut (for
Tarasov).
3. Nef'tyanoye upravleniye Soveta narodnogo kho-
zyaystva SSSR (for Agadzhanov).

16(1).

SOV/22-12-2-2/8

AUTHOR:

Sarkisyan, V.S.

TITLE:

Torsion of Anisotropic Prismatic Bars With an Elongated Profile

PERIODICAL:

Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, 1959, Vol 12, Nr 2, pp 21-36 (USSR)

ABSTRACT:

The author generalizes a method of D.Yu. Panov [Ref 2,3] and investigates the torsion of an anisotropic bar with a small elongated cross section. He introduces a small parameter λ in the equation of the cross section, whereby it becomes possible to represent the stress function at first as a formal series in λ :

$$(1) \quad \Psi(x,y) = -\frac{\nu}{a_{22}} y^2 + \lambda \left\{ \frac{\nu}{a_{22}} y(\varphi_1 + \varphi_2) + \frac{a_{12} \nu y^2}{2 a_{22}} D_x(\varphi_1 + \varphi_2) + \dots \right\} + \dots,$$

where ν is the torsion angle, a_{ik} are elastic constants,

$D_x = \frac{d}{dx}$, $y = \lambda \varphi_1(x)$ and $y = \lambda \varphi_2(x)$ is the boundary

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Torsion of Anisotropic Prismatic Bars With an
Elongated Profile

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of the cross section. The series is essentially simplified, if the cross section is symmetrical ; in particular the author considers elliptic, trapezoidal, triangular and air-foil-shaped cross sections as examples. Finally with the aid of the theorem on differential inequalities of S.A. Chaplygin he proves the convergence of (1). There are 6 figures, and 5 references, 4 of which are Soviet, and 1 English.

ASSOCIATION: Yerevanskiy gosudarstvennyy universitet (Yerevan State University)

SUBMITTED: December 2, 1958

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16(1)

AUTHOR:

Sarkisyan, V.S.

05689

SOV/22-12-4-3/9

TITLE:

Torsion of Multilamellar Prismatic Bars of Rectangular Cross Section With Consideration of Linear Creeping

PERIODICAL:

Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, 1959, Vol 12, Nr 4, pp 35 - 56 (USSR)

ABSTRACT:

The paper consists of two parts. I. The author considers the torsion of a multilamellar prismatic bar which consists of several elastic isotropic prismatic parts being soldered together along the lateral surfaces. The solution is represented by infinite trigonometric series, for the coefficients of which the author obtains recurrent relations. He gives expressions for tensions and bending resistance. As a special case the author considers thin bars. II. Considering the torsion the author takes into account the linear creeping. The solution is carried out for thin bars only. Torsion angles and components of tension are given as functions of time. Numerical example.
The author mentions N.I. Muskhelishvili and S.G. Lekhnitskiy.

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Torsion of Multilamellar Prismatic Bars of Rectangular
Cross Section With Consideration of Linear Creeping

05690

SOV/22-12-4-3/9

He thanks N.Kh. Arutyunyan, Academician of the Academy of
Sciences of the Armenian SSR and K.S. Chobanyan, Docent,
for the subject and guidance.

There are 4 figures, and 5 Soviet references.

ASSOCIATION: Yerevanskiy gosudarstvennyy universitet (Yerevan State
University)

SUBMITTED: September 19, 1958

Card 2/2

SAPKISAN, V.S.

Report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics,
Moscow, 27 Jan. - 3 Feb. '60.

234. G. I. Pukhovskiy (Moscow): Large deflections of reinforced machine of industrial mills.
235. E. P. Babitskiy (Moscow): On E. Rabinovich (Kiev): Creep strength of turbine steel.
236. A. I. Babitskiy (Moscow): Flow and consolidation of sands under the action of seepage forces.
237. E. I. Babitskiy (Kiev): Creep.
238. E. I. Babitskiy (Kiev): Some problems in the theory of fluidity concerning the design of rock foundations.
239. E. I. Babitskiy (Kiev): Some different solutions of theoretical mechanics.
240. E. I. Babitskiy (Moscow): On the propagation of elastic plane waves in a half-space.
241. E. I. Babitskiy (Moscow): Propagation of disturbances in continuous media.
242. E. I. Babitskiy (Kiev): Earth pressure on flexible retaining walls.
243. E. I. Babitskiy (Kiev): On the pressure of a punch on an elastic half-space.
244. E. I. Babitskiy (Moscow): Types of high molecular and dielectric structures and their mechanical properties.
245. E. I. Babitskiy (Kiev): On the influence of the nature of principal stresses on the fatigue strength.
246. E. I. Babitskiy (Moscow): The application of the method of homotopy solutions to some two-dimensional problems of the theory of elasticity.
247. E. I. Babitskiy (Kiev): Some three-dimensional problems of fluid equilibrium in fields, plastic solids.
248. E. I. Babitskiy (Moscow): On the application of the homotopy-solution principle to problems of creep theory of concrete.
249. E. I. Babitskiy (Moscow): Some problems of the integral operator theory of creep.
250. A. G. Babitskiy (Moscow): Design of viscoelastic beams for bending and temperature effects.
251. E. I. Babitskiy (Kiev): The experimental study of the deformations of rock foundations.
252. E. I. Babitskiy (Kiev): The determination of the coefficient of a fully supported plate by the method of successive approximations.
253. E. I. Babitskiy (Kiev): Problem of anisotropic plasticity and of anisotropic creep.
254. E. I. Babitskiy (Kiev): The impact of a double punch on a half plate.
255. E. I. Babitskiy (Kiev): The use of similarity considerations in the design of beams in the design of beams by successive approximations.
256. E. I. Babitskiy (Kiev): Stability of cellular structures built in soft ground.
257. E. I. Babitskiy (Moscow): Some problems of thin bi-layered plates supported by an elastic layer of finite thickness.
258. E. I. Babitskiy (Moscow): Plastic bending of plates into cylindrical shells.
259. E. I. Babitskiy (Moscow): A beam on a two-layer half space beyond the elastic limit.
260. E. I. Babitskiy (Kiev): Some problems of creep and consolidation of saturated soils.
261. E. I. Babitskiy (Kiev): Investigation of the natural frequencies of plates of constant and variable thickness.
262. E. I. Babitskiy (Kiev): Dynamic problems of the design of retaining walls and soil foundations under impact loads.
263. E. I. Babitskiy (Kiev): Solution of some dynamic problems of higher structures by the method of initial parameters.
264. E. I. Babitskiy (Moscow): On some problems of the theory of fluidity and soil mechanics.
265. E. I. Babitskiy (Moscow): On a class of solutions of boundary value problems in plasticity.
266. E. I. Babitskiy (Moscow): The effect of internal friction on the strength of beams and plates under impulsive loading.
267. E. I. Babitskiy (Moscow): Stresses in allgedial

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21985

S/022/61/014/002/003/008
B112/B203

AUTHOR:

Sarkisyan, V. S.

TITLE:

Torsion of anisotropic prismatic rods with a cross section in the form of an extended airfoil section

PERIODICAL:

Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, v. 14, no. 2, 1961, 45-70

TEXT: In the present study, the author continues a series of papers by other authors (L. S. Leybenzon, D. Yu. Panov, V. D. Vantorin, A. R. Yanpol'skiy) on the torsion of orthotropic and non-orthotropic rods with airfoil sections of the special (semicubical parabola) and of the general type. He studies the torsion of a non-orthotropic rod, the cross section of which has the form of an extended airfoil section of the general type. He proceeds from the "profile equations":

$$y = a (x/b)^m [1 - (x/b)^p]^q,$$

$$y = -a_1 (x/b)^m [1 - (x/b)^p]^q$$

and the differential equation:

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$$a_{11} \frac{\partial^2 \Psi}{\partial x^2} - 2a_{12} \frac{\partial^2 \Psi}{\partial x \partial y} + a_{22} \frac{\partial^2 \Psi}{\partial y^2} = -2\gamma^h \quad (\gamma^h = \text{relative angle of torsion}) \text{ for}$$

the stress function Ψ with the boundary condition $\Psi = 0$ along the profile contour. The stress function is found by the method of the small parameter (λ) by setting $y = \lambda \eta$, $\Psi(x, y) = \phi(x, \eta; \lambda)$. Now, the equation for the stress function has the form:

$$\lambda^2 a_{11} \frac{\partial^2 \phi}{\partial x^2} - 2\lambda a_{12} \frac{\partial^2 \phi}{\partial x \partial \eta} + a_{22} \frac{\partial^2 \phi}{\partial \eta^2} = -2\gamma^h \lambda^2, \text{ the profile equations:}$$

$y = \lambda c_1 \gamma(x)$, $y = \lambda c_2 \gamma(x)$, and the boundary conditions:

$\phi[x, c_1 \gamma(x); \lambda] = 0$, $\phi[x, c_2 \gamma(x); \lambda] = 0$. The formulation

$\phi(x, \eta; \lambda) = \sum_{k=0}^{\infty} P_k(x, \eta) \cdot \lambda^k$ leads to a system of recurrent differential equations for the functions P_k . The first five of them: $P_0 (\equiv 0)$,

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Torsion of ...

P_1 ($\equiv 0$), P_2 , P_3 , P_4 are computed, and substituted in the expression for Ψ .

Then, the author determines the torsional strength of the rod:

$$G_t = \frac{2}{\pi} \int_0^b \int_{\lambda c_2}^{\lambda c_1} \Psi(x, y) dx dy, \text{ the tangential stresses } \tau_{xz} \text{ and}$$

τ_{yz} , as well as the maximum value $|\tau_{xz}|^{\max}$. Then, he deals with special cases: rod with sickle-shaped, parabolic profile; rod with profile in the form of a parabolic segment; rod with profile in the form of a semicubical parabola. Finally, the author examines the accuracy of approximate formulas for torsional strength. A. Sh. Lokshin is mentioned in a footnote. There are 4 figures, 6 tables, and 22 references: 17 Soviet-bloc and 5 non-Soviet-bloc. X

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AUTHOR: Sarkisyan, V. S.

TITLE: Flexure of anisotropic, prismatic and thin, symmetrical beams

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, v.14, no.4, 1961, 71-86

TEXT: The solution for the problem of beam flexure is found in the form of a series in powers of the small parameter λ . Expressions are obtained for the stress functions, the tangential stresses, the relative angle of torsion and the shear (flexure) center. As an example, the flexure problem for an airfoil section is solved. Fig.1 shows the prismatic beam. The beam sections are bounded by two arcs of the curves

$$y = \lambda f(x) \quad (0 < \lambda < 1)$$

$$y = -\lambda f(x) \quad (1, 1)$$

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The stressed state is expressed by

$$\sigma_x = \sigma_y = \tau_{xy} = 0,$$

$$\tau_{xz} \neq 0 \quad \tau_{yz} \neq 0,$$

$$\sigma_z = -\frac{P}{I} zy, \quad (1.2)$$

where I is the moment of inertia with respect to the x -axis, P is the force directed along the y -axis. By virtue of the compatibility equations one obtains, for determining the stress function, the equation

$$a_{44} \frac{\partial^2 \psi}{\partial x^2} - 2a_{45} \frac{\partial^2 \psi}{\partial x \partial y} + a_{55} \frac{\partial^2 \psi}{\partial y^2} = -\frac{P}{I} (2a_{13}x + a_{36}y) - 2\theta -$$

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$$- a_{44} \frac{\lambda^2 p}{2I} Df^2 - a_{45} \frac{p}{I} y, \quad (1.6)$$

where ϑ is a constant yet to be determined which represents the angle of torsion, a_{ij} are the elastic constants, and

$$D^k = \frac{\partial^k}{\partial x^k} \quad (k=1,2,3,\dots)$$

By the transformation

$$y = \lambda \eta, \quad \psi(x, y) = \frac{p}{I_0} \Phi(x, \eta; \lambda), \quad \vartheta = \frac{p}{I_0} \theta \quad (1.8)$$

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one obtains

$$\lambda^3 a_{44} \frac{\partial^2 \bar{\phi}}{\partial x^2} - 2\lambda^2 a_{45} \frac{\partial^2 \bar{\phi}}{\partial x \partial \eta} + \lambda a_{55} \frac{\partial^2 \bar{\phi}}{\partial \eta^2} = -2a_{13}x - \lambda \eta (a_{36} + a_{45}) - \lambda^2 a_{44} \frac{Dx^2}{2} - 2\theta \lambda^3 \quad (1.9)$$

The solution of Eq. (1.9) is expressed in series in λ :

$$\bar{\phi}(x, \eta; \lambda) = \frac{Q_{-1}(x, \eta)}{\lambda} + \sum_{k=0}^{\infty} Q_k(x, \eta) \lambda^k \quad (1.11)$$

Thereupon, the functions Q are determined by recursion formulas. Finally, one obtains for the stress function the formula

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$$\begin{aligned} \psi(x, y) = \frac{p}{I} (y^2 - \lambda^2 f^2) \left\{ A_{-1}x + A_0y + \lambda^2 [A_{10}D^2f^2 + A_{11}xD^3f^2 + \right. \\ + y(A_{21}D^2f^2 + A_{22}xD^3f^2) + (y^2 - \lambda^2 f^2)(A_{30}D^2f^2 + A_{31}xD^3f^2) + \\ + (y^2 - 5\lambda^2 f^2)(A_{32}D^2f^2 + A_{33}xD^3f^2)] + \lambda^3 A_{20} \frac{I_0}{\rho} + \\ \left. + \lambda^4 [(A_{34}D^2f^2 + A_{35}xD^3f^2)Df^2 + (A_{36}Df^2 - 6A_{33}xD^3f^2)D^2f^2] \right\} + \dots \end{aligned}$$

(1.17)

X₂₀

(where the coefficients A involve the constants a_{ij}). Determining stress components, ϑ and the shear center: Expressions for the stress components τ_{zx} and τ_{yz} are derived. For ϑ one obtains

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$$\theta = \frac{3Pa_{55}}{8 \left(\int_{-b_1}^{b_2} f^3(x) dx \right)^2} \left\{ \frac{1 + 4A_{-1}}{\lambda^3} \int_{-b_1}^{b_2} x f^3(x) dx + \frac{4A_{11}}{\lambda} \int_{-b_1}^{b_2} f^3(x) x D^2 f^2 dx \right. \\ \left. - \lambda \left[\int_{-b_1}^{b_2} f^3(x) B_1(x, a_{1j}) dx + \int_{-b_1}^{b_2} f^5(x) B_2(x, a_{1j}) dx \right] \right\} + \dots \quad (2.6)$$

If the point of application of the force coincides with the shear center, then there is no torsion. In this case one should set $\theta = 0$ in Eq. (1.17). Thereupon, the coordinate $\bar{x}$ of the center of shear is determined by the well-known Duncan-Leybenzon formula

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$$\bar{x} = \frac{1}{P} \int_{-b_1}^{b_2} \int_{-h_f}^{h_f} (\tau_{xz} y - \tau_{yz} x) dx dy$$

Griffith and Taylor determined, by approximate methods, the position of the center of shear for an isotropic prismatic beam. Their formula gives an underestimate for the coordinates of the shear center. L. S. Leybenzon's formula for the center of shear of an orthotropic beam, gives an overestimate with respect to the exact value (Ref. 1: Sobraniye trudov, v. 1, Izd. AS SSSR, M., 1951). From these two formulas (for the under- and overestimate), the author derives the exact formula for coordinates of the center of shear of an anisotropic (non-orthotropic) symmetrical beam. In this formula, the first term corresponds to the center of shear of an orthotropic beam, and the other terms are due to non-orthotropicity. The above results are illustrated by means of an airfoil (Prof.

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